

ENERGY RESOURCE INVESTMENT PLAN QUARTERLY REPORT

The California Consumer Power and Conservation Financing Authority (CPA) issued its first Energy Resource Investment Plan on February 15, 2002, in compliance with Public Utilities Code Section 3369. In adopting the Plan on February 14, 2002, the Board of Directors directed the CPA to provide quarterly updates beginning in April. This document is the first quarterly update to the Plan, and it will be followed by subsequent updates in July and October 2002. The next annual Investment Plan will be produced by February 15, 2003.

OVERVIEW

While significant decisions affecting California's electric energy market are imminent, the CPA continues to act on its mandate "to furnish the citizens of California with reliable and affordable electrical power (Public Utilities Code Section 3300)." With the exception of new projects intended to meet municipal utility needs, however, there continues to be uncertainty with respect to a market or buyer for the energy output of new projects. As stated in the February 15, 2002 Energy Resource Investment Plan (ERIP), the investor-owned utilities do not yet present a market, and the Department of Water Resources is in its last year of statutory procurement responsibility. Adding to this uncertainty is the California Public Utilities Commission (CPUC) proceeding on generation procurement and renewable resource development. The uncertainty surrounding a market or buyer for the energy output of the renewable projects being pursued by the Power Authority will probably continue until the issues raised by this CPUC proceeding are resolved. The CPA staff is continuing to participate in proceedings and filings with the CPUC, the ISO market design process, and legislative committee hearings.

In the 2002 Legislative Session, there are 67 energy-related bills being considered at this time. One significant piece of legislation (SB 532) is the California Renewables Portfolio Standard (RPS) that aims to increase the amount of renewable energy procured by the state's electrical corporations from 10%-20% by the year 2010. If passed, this bill will set a firm target and a clear message that California will take the lead to pursue clean energy resources to power the state. The CPA's Investment Plan outlines a strategy to help meet this mandate.

In addition, the CPA is postured to act as a safety net in meeting California's energy reserve needs by ensuring power plants under construction are completed. The CPA can be the "builder of last resort" if the market fails to complete critically needed projects.

CPA Highlights this Quarter

- Industrial Development Bonds Launched
- Demand Reserves Program Approved
- San Francisco Project Endorsed
- /Real Time Metering Loan Program Initiated
- PUC Filings Developed (ongoing)
- Independent System Operator Market Design Facilitated (ongoing)

ROLES OF THE CPA

The CPA's role in encouraging efficiency, conservation and renewables continues to be reinforced by both the Governor and Legislature. As a financing authority, the CPA can complement – not duplicate – the renewable and energy efficiency programs of other energy agencies. For example, tax exempt financing through Industrial Development Bond programs will create new opportunities for businesses wanting to manufacture renewables in California (See Industrial Development Bond Program and Public Agency Loan Pool below).

The CPA's primary statutory responsibility of assuring sufficient and adequate reserves continues to drive work with the CPUC, DWR and CAISO to implement a demand reserves program this summer. The program offers dispatchable clean reserves while creating an infrastructure in which real time communication technologies will ensure system reliability and important verification data to the State's grid operators (See Demand Reserves Program below).

The CPA's role in addressing energy reliability is underscored by a project to develop a power plant facility at the San Francisco International Airport. Both the CEC and CAISO have cited the San Francisco-San Jose corridor as a critical reliability area in need of new generation. This targeted ownership role will help relieve grid congestion for the San Francisco Peninsula while providing much needed capacity for the city (See San Francisco Project below).

CPA INVESTMENT PORTFOLIO TO FILL GAPS

The CPA currently is working on development of a portfolio of projects and programs that can be supported by revenue bonds. Attachment A provides a summary of all current CPA activities in support of the ERIP. The Investment Portfolio is organized to correspond to the three identified in the ERIP (ERIP pages 13-14).

1. Gap: Lack of Clean Energy Financing

Using the CPA's capability to facilitate financing clean resources – renewable energy, energy efficiency and clean on-site power technologies. Initial projects include:

- *New Centralized Renewables* – facilitate financing and procurement of about 475 MW firm capacity of new renewables (1,275 MW installed capacity) chosen from projects submitted to the CPA or CEC. The CPA has 2,400 MW of signed Letters of Intent. (The CPA plan is to target development of approximately 1000 MW.)
- *Existing Centralized Renewables* – broker procurement of 150 MW of existing biomass plants so that they keep providing air quality and solid waste management benefits.
- *Customer Efficiency & Renewables* – provide consumers and businesses the opportunity to finance energy efficiency and renewables (150 MW in the private sector) in various ways, including through their utility bills.

Accomplishments this Quarter:**Energy Financing Industrial Development Bond Program**

In late February, the CPA was allocated \$30 million of tax exempt project financing to launch the Energy Financing Industrial Development Bond Program. Small manufacturers are eligible to receive the below-market rate loans to be used toward 1) purchasing and installing energy efficiency, renewable and clean energy systems and equipment or 2) establishing and expanding the production of clean energy systems and components.

In early March the CPA launched its outreach efforts, in conjunction with the California Energy Commission, California Debt Limit Allocation Commission, the California Manufacturers and Technology Association and others. In mid-April, the CPA engaged more than 50 first-time small business loan program participants. The CPA provided two informational sessions outlining the program criteria, project eligibility and the bond issuance time schedule.

The first-round of applications are due in May and a review process will begin in order to award loans to successful applicants in June. The Bond financing program meets a critical goal outlined in the Energy Resource Investment Plan which is promoting clean and renewable technologies to power the State while providing job growth and assisting small businesses.

2. Gap: Lack of Strategic Reserves

In targeting resources to help meet peak demand and system or local reserve needs, the initial projects include:

- *San Francisco-San Jose Corridor Project* – a power supply project designed to enhance local reliability in this grid-congested area.
- *Greening the Peak* – contract for 1,000 MW of demand-side reserves (for most of which the CPA has Letters of Intent) within the next year and 1,900 MW by 2006, plus 100 MW of peaking capacity powered by renewable fuels, increased use of real-time metering to lower peak demand, or re-powering dirty plants needed for local reliability.
- *Safety Net* – assure lower cost construction of new power plants under existing contract to the California Department of Water Resources (DWR) that will provide needed reliability protection and displace output from dirtier plants.

Accomplishments this Quarter:**Demand Reserves Program (Negawatt Reserves)**

The CPA expects to provide Department of Water Resources (DWR) with up to 1000 MW of demand reserves in late Summer 2002 to balance energy supply and demand for the State. The Demand Reserves Program is a clean and cost effective way to reduce electricity use during critical periods of energy demand while supplying dispatchable reserve capacity when load falls short and use is high.

The system design provides real-time and verifiable demand reduction data. Unlike other programs, cost saving will come in ancillary services currently paid for at spot market prices to maintain system operations by the DWR.

The 5-year program will use meters installed last year by the CEC, the ISO ancillary services market structure, and a centralized scheduling coordinator to help minimize costs.

San Francisco Airport Project

The CPA staff continues to work with the San Francisco Public Utilities Commission (SFPUC) in developing a 57 MW power plant to provide more electricity supply and reliability to the single, most vulnerable location in California's electric system – the San Francisco Peninsula. Currently, the CPA is developing a cost analysis for a combined-cycle combustion turbine power plant to be located at the San Francisco International Airport. The first priority of the project will be to provide back-up generation to the airport, thus keeping the airport fully operational during periods of electricity and natural gas supply disruption.

The CPA will construct, own and operate the plant while selling power exclusively to the SFPUC. The anticipated two-phase project will produce 47MW of power during the first quarter of 2003 and Phase 2 will upgrade the generating capacity to 57 MW by the third quarter of 2003.

Real Time Metering

In October, the CPA invited proposals for financing of real time meters for electric power customers.

The CPA staff reported the top four proposals to the Board at the March 15 Board meeting and is moving forward with those short listed proposals that will put the technological and communication infrastructure in place and could immediately deploy existing time of use tariffs, with the ability to subsequently support a real time communication tariff or demand response system. The first contract is on the Board Agenda for April 26. The three remaining short-listed bidders require further commitments from distribution utilities and/or the California Public Utilities Commission before being ready to proceed with financeable projects.

3. Gap: *Insufficient Incentives for Greening Public Buildings*

In targeting clean resources to meet by 2006 twenty percent of the estimated 3,300 MW electricity demand of all public buildings – state and local government, schools and possible participation of federal facilities, the CPA is receiving responses from Requests for Bids that could provide up to 200-500 MW of clean distributed generation for public buildings through a bulk procurement process, thereby lowering installed costs for all consumers.

Accomplishments this Quarter:

Distributed Generation Procurement

As a financing authority, the CPA saw an important role to step in as a bulk procurer of Distributed Generation (DG) technologies. As laid out in the ERIP, the CPA could help

drive down costs for evolving DG technologies by pulling together group-buy orders in quantities that will illicit price discounts from manufacturers or other providers.

The CPA's Distributed Generation Procurement program meets two strategies, providing the state with "clean energy resources" and "greening public buildings."

Status of Request for Bids

Three RFBs were issued in December of 2001, with due-dates in January and February 2002. This involved three bidders conferences, extensive question and answer clarification processes, and the convening of both technical expert review panels and an inter-agency working group with significant staff time commitment by staff of Department of General Services to evaluate company and equipment bid submissions.

Fuel Cells: 14 eligible bidders posted on Web site (www.capowerauthority.ca.gov). Bidders screened for business and technology performance. Price competition not yet issued, pending estimates of public agency "buy" orders.

Decentralized Solar (PV): 28 bids received. Eligible bidders posted on the Web site in mid-April for 18 Bid Pool (turn-key installation) bidders and 15 Equipment-only bidders. Staff is still evaluating Master Contract candidates (two or more to be selected to deliver volume-based best pricing commitments, based on solicited letters of commitment from public agency buyers).

Combined heat and power (cogeneration, micro-turbines): 23 bidders, still being evaluated. Eligible bidders list expected by first week of May, screened for business and technology performance. Price competition not yet issued, pending estimates of public agency "buy" orders.

Anticipated Next Steps for RFB's

- Creation of master procurement lists from which public agency buyers (state, local, schools, other public agencies, as their procurement regulations permit them to buy off master State lists) will pay a "broker fee" to buy off the DG procurement lists. This funds State efforts to create the buying lists.
- Ascertain firm commitments for buying DG technologies from potential public agency customers to enable negotiating volume-based pricing commitments via Master Contracts (solar technology is the most likely case where firm demand can be leveraged into volume discount pricing).
- Establishment of a Public Agency Loan Pool to permit public agency buyers of DG or efficiency equipment and services to finance equipment via the CPA's tax-exempt revenue bond funds.

RFB Outreach and Regulatory Issues to Support Planned Implementation

Staff has had ongoing involvement in and outreach to a variety of stakeholder groups representing state, local and federal government as the potential customers

of the CPA's procurement and financing programs. Activities included active participation in renewable and distributed generation forums held by the Office of Planning and Research and the Local Government Commission. Please see Attachment B for list of key partnerships involved in the process.

Staff has identified several key regulatory proceedings at the CPUC that could affect the CPA's mission to foster DG technologies. These include distributed generation regulations, definitions of "departing loads" (possibly including DG) that could be assigned cost-sharing burdens for the DWR long-term contracts, and costs and timeframes expected for grid interconnection. Staff is monitoring stakeholder input to those proceedings to determine if any additional CPA action is warranted.

Staff also has actively engaged with State financial control agencies to highlight "non-level playing field" criteria being used for retail energy purchases by State agencies, versus the cost of distributed generation on a lifecycle cost basis. This barrier to State agency purchase of DG technology could hurt the projected cost-effective penetration of these technologies in State facilities.

Public Agency Loan Pool

Greening public agencies is a cornerstone of the CPA's Energy Resource Investment Plan, and is targeted for up to \$1.5 billion of our bond investment portfolio. This could produce 625 MW of peak capacity and over 3,000 GWh of reduced power consumption annually.

To facilitate these investments occurring throughout the state, staff and our financial advisor are working to establish a Public Agency Loan Pool to offer financing for any public agency (federal, state, local, including public schools and special districts) to undertake distributed generation projects - alone, in tandem with energy efficiency, or for efficiency alone. This loan pool will rely upon tax-exempt debt, structured to match the expected technology life, which should enable energy improvements to cut the total costs of meeting energy requirements in these public facilities. More simply, it is expected these energy improvement projects will be realized at an equivalent cost of energy that is less than current utility rates. We expect to reduce peak power demand by 25 MW and reduce energy consumption by 110 MWh for each \$50 million loaned.

This loan pool will target loans with a minimum size of \$2 million, larger than the loans currently offered by the Energy Commission exclusively for the use of local public agencies. This size of loan is conducive to the issuance and administrative costs of revenue bonds. These loans may be used either for existing facilities, or to fund enhanced energy design and equipment to be included in new construction projects.

Staff has developed a communications strategy now being launched to secure commitments for this pool. Early commitments are expected from medium-sized jurisdictions and community college districts.

<h3>CPA Policy Role</h3>

The CPA has an important place at the energy table in its role to offer policy shaping comments and participation in hearings, workshops and discussions with the various

state energy agencies. The CPA has been asked to file comments with the CPUC on resource procurement needs, renewable energy investments and Coordinating and communicating with other agencies is important as the CPA pursues projects that help to bring reliability and affordability to California's electricity market.

Please see attached filings by the CPA during the past quarter.

- 2002 Energy Efficiency Program Selection
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Procurement and Reserves

The CPA has stated that healthy reserve margins can be met with demand side programs and renewable resource procurement. The CPA's involvement in the PUC's procurement proceeding and market design workshops conducted by the ISO